



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/559,595	04/28/2000	Madeleine Prigent	Q58982	3132

7590 06/20/2002
Sughrue Mion Zinn Macpeak & Seas PLLC
2100 Pennsylvania Avenue
Suite 800
Washington, DC 20037-3213

EXAMINER

GRAY, JILL M

ART UNIT	PAPER NUMBER
----------	--------------

1774

DATE MAILED: 06/20/2002

10

Please find below and/or attached an Office communication concerning this application or proceeding.

7A-10

Office Action Summary	Application No. 09/559,595	Applicant(s) PRIGENT ET AL	
	Examiner Jill M Gray	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7 and 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7 and 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment

The objection to the drawings is withdrawn in view of applicants' amendments.

The objection to claims 12-16 is moot in view of applicants' amendments.

The rejection of claims 3-11 under 35 U.S.C. 112, second paragraph is moot in view of applicant's amendments.

The rejection of claims 1-3, 8, and 10 under 35 U.S.C. 102(b) as being anticipated by European Patent Publication No. 015213 is moot in view of applicants' amendments.

The rejection of claims 1-5, 8, and 10 under 35 U.S.C. 102(b) as being anticipated by Rinehart et al, 5,324,588 is moot in view of applicants' amendments.

The rejection of claims 1-5 and 8-11 under 35 U.S.C. 102(b) as being anticipated by Kinaga et al, 5, 182,786 and under 35 U.S.C. 102(e) as being anticipated by Szum et al, 6, 110,593 is moot in view of applicants' amendments.

The rejection of claims 1-11 under 35 U.S.C. 102 (b) as being anticipated by Brauer, 5,672,640 is moot in view of applicants' amendments.

The rejection of claims 6 and 7 under 35 U.S.C. 103(a) as being unpatentable over Szum or Kinaga each in view of Brauer is moot in view of applicants' amendments.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 1774

2. Claims 1 and 15 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. More specifically, claim 1 as amended, implies that the cable comprises a covering layer, a separate covering material, and composite particles as a separate layer. The specification, as originally filed, only describes a cable coated with a polymer resin that is filled with intercalated filler. There is no support for a "covering material" or "composite material". Accordingly, the specification is not commensurate in scope with the claims.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, claims 1 and 15 are indefinite and does not clearly define the cable structure or method. The covering material of the covering layer is not clearly defined. The composite material of the covering material is unclear. The specific structural relationship of each of these components is not clear. Nor is it clear as to whether the cable is coated or insulated with composite particles per se or coated with a polymeric base resin filled with inorganic particles.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3-7, 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson, 5,173,960 in view of Pedlow 4,018,983 and 4,018,962 (hereinafter Pedlow).

7. Dickinson teaches a cable comprising at least one optical fiber and at least one covering layer, as required by claims 12-14. In addition, he teaches that his cable has a barrier comprised of an organic base resin and an additive such as mica, which can be used in the form of a tape or coextruded with the jacketing composition. Dickinson is silent as to the specific teaching of intercalated, exfoliated or expanded mica.

8. Pedlow teaches a fire protective sheath or boot ('983) and fireproofing tape ('962) used for cables, splices, and the like. Both the sheath/booth and tape are comprised of an organic compound of the type set forth by applicants in claims 9-11, and an inorganic compound, such as expanded mica, vermiculite or bentonite, said compounds being of the sort contemplated by applicants in claims 3-7. See '983, abstract, column 2, lines 34-42, column 4, lines 39-49; '962, abstract, column 1, lines 59-67, column 3, and column 5, lines 3-15.

9. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cable of Dickinson by using as the barrier, either the tape or sheath/boot taught by Pedlow, to fireproof said cable as well as protect it against electrical arcing, and heat and fire damage. As to the formation of a composite material wherein the organic material is inserted between the layers of the inorganic particles, it

is the position of the examiner that this property is a necessary result when expand/exfoliated/intercalated inorganic particulate materials, having known layered structures, are mixed with a resin. Accordingly, this limitation is not construed to be a matter of invention, but is inherent, in the absence of clear, factual evidence to the contrary. Applicants have not clearly defined that which they regard as their invention, nor is there evidence of unexpected or superior properties of the present invention over what would have been expected from the teachings in the prior art.

Response to Arguments

10. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Application/Control Number: 09/559,595
Art Unit: 1774

Page 6


shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M Gray whose telephone number is 703.308.2381. The examiner can normally be reached on 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 703.308.0449. The fax phone numbers for the organization where this application or proceeding is assigned are 703.305.5408 for regular communications and 703.305.3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0651.

Jill M Gray
Examiner
Art Unit 1774


June 17, 2002

CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

